

# S&MA Mission Services Task Directive

REC'D JAN 22 2002

Control No. 0013	ORG No.: QS10	PROJECT SYMBOL: NEP	Contract No. NAS8-00179
Originator's Signature: QS10/Tom Hartline <i>Alan L. Clark</i>		Date: <i>1/15/02</i>	Originator's Priority: High
Office Manager's Signature: QS10/Tom Hartline <i>Alan L. Clark</i>		Date: <i>1/15/02</i>	
COTR's Approval: QS01/Terry Hamm <i>Terry Hamm</i>		Date: <i>1-18-02</i>	
<b>Subject:</b> Safety & Mission Assurance support for the Nuclear Electric Propulsion (NEP) Project			

## Task Description:

### Safety (PWS Section 3.0)

- 1) Support Product Development Team to assure safety and requirements are identified, understood, and incorporated in design
- 2) Development of S&MA Plan as required for ISO 9000 compliance.
- 3) Support Milestone Reviews (SRR, PDR, CDR, SRP, etc)
- 4) Develop Safety Data Package/Hazard Analysis for conceptual designs
- 5) Investigate & Work with other Government (D.O.E. & Air Force) and other NASA Centers to Develop the Design Safety Requirements Required for flight certification.
- 6) Support Nuclear Safety Working Groups As required
- 7) Support Software Safety for project as applicable

### R&M (PWS Section 5.0)

- 1) Development of S&MA Plan as required for ISO 9000 compliance.
- 2) Support Product Development Team to assure reliability requirements are included in design
- 3) Support Milestone Reviews, (SRR, PDR, CDR, etc)
- 4) Develop FMEA/CIL and Reliability Assessments

### Project Assurance (PWS Section 8.0)

- 1) Participate in the milestone reviews, data reviews, safety reviews and flight readiness or operations
- 2) Support development of S&MA requirements required for flight certification
- 3) Coordinate the HEI S&MA activities with the S&MA project lead to include resource status
- 4) Support development of S&MA Plan as required for ISO 9000 compliance
- 5) Work with other Government (D.O.E. & Air Force) and other NASA Centers to Develop the Design Reliability Requirements Required for flight certification.

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## Deliverables:

### Safety

- 1) Safety inputs to the S&MA Plan.
- 2) Safety documentation, PHA, HAs, etc, to support Milestone Reviews
- 3) Safety Data Package as appropriate for nuclear safety

### R&M

- 1) Reliability inputs to S&MA Plan
- 2) Reliability review comments to Milestone Review documentation
- 3) FMEA/CIL or Reliability Assessments as appropriate for various project milestones

### Project Assurance

- 1) Provide periodic status of functional discipline support to project in form of matrix
- 2) S&MA Plans in conjunction with assigned disciplines

## Schedules/Duration:

- 1) Support schedules as defined by the Project
- 2) PHA and FMEA to start in early February 2002 and be 75% complete by the middle of March 2002. Both analyses shall be updated on a monthly basis until the design is frozen.

## Resource Estimate:

(b)(4)

Report Progress To: NEP Project Lead

Frequency of Report:

Weekly